ABSTRACT

Methods, systems, and articles of manufacture consistent with the present invention time profile program threads using data corresponding to states of the registers of a processor(s) executing the threads. Methods, systems, and articles of manufacture consistent with the present invention determine whether a selected thread of execution of a multi-threaded program is running by suspending execution of the multi-threaded program, retrieving register data corresponding to the selected thread, computing register information based on the register data, comparing the computed register information with stored register information from a previous suspension of the multi-threaded program, and regarding the selected thread as running if the computed register information is different from stored register information. The last operation of regarding the selected thread as running may involve updating the previous register information based on the computed register information, and/or providing an indication corresponding to a portion of the program containing the selected thread.